



Tabu search with graph reduction for finding maximum balanced bicliques in bipartite graphs

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Résumé en anglais	<p>The Maximum Balanced Biclique Problem is a relevant graph model with a number of applications in diverse domains. However, the problem is NP-hard and thus computationally challenging. In this paper, we introduce a novel metaheuristic algorithm, which combines an effective constraint-based tabu search procedure and two dedicated graph reduction techniques. We verify the effectiveness of the algorithm on 30 classical random benchmark graphs and 25 very large real-life sparse graphs from the popular Koblenz Network Collection (KONECT). The results show that the algorithm improves the best-known results (new lower bounds) for 10 classical benchmarks and obtains the optimal solutions for 14 KONECT instances.</p>
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Liens

- [1] <http://okina.univ-angers.fr/publications?f%5Bauthor%5D=26863>
- [2] <http://okina.univ-angers.fr/jinkao.hao/publications>
- [3] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=29524>
- [4] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=8931>
- [5] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=29525>

- [6] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=3676>
- [7] <http://okina.univ-angers.fr/publications?f%5Bkeyword%5D=8662>
- [8] <http://okina.univ-angers.fr/publications/ua20333>
- [9] <http://dx.doi.org/10.1016/j.engappai.2018.09.017>
- [10] <https://www.sciencedirect.com/science/article/abs/pii/S0952197618302033?via%3Dihub>

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